

LATITUDE VARIATION OF RECURRENT FLUXES IN THE OUTER SOLAR SYSTEM

S P Christon and E C Stone
California Institute of Technology, USA

(Confirming Abstract)

Recurrent low-energy ($\gtrsim 0.5$ MeV) proton flux enhancements, reliable indicators of corotating plasma interaction regions, were observed on the Voyager 1 and 2 and Pioneer 11 spacecraft in the heliographic latitude range 2°S to 23°N and the heliocentric radial range 11 to 20 AU [Christon and Stone, 1985]. After a period of rather high correlation between fluxes at different latitudes in early 1983, distinct differences developed in the fluxes during an overall flux decrease. The flux intensities returned to higher levels in early 1984 and differences in both the recurrence frequency and flux intensity persisted into 1985, as Voyager 1 traveled to 23 AU and 25°N latitude. Intercomparison of data from the three spacecraft indicates that the flux differences are most likely due to latitudinal, rather than radial or temporal, variations.

References

Christon, S P and E C Stone [1985], *Geophys Res Lett*, 12, 109.